IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLIZANT:

Steven W. Meeks and Rusmin Kudinar

APPLICATION NO.:

10/660,984

FILING DATE:

September 12, 2003

TITLE:

System and Method For Simultaneously Measuring Thin Film

Layer Thickness, Reflectivity, Roughness, Surface Profile &

Magnetic Pattern On Thin Film Magnetic Disks & Silicon Wafers

EXAMINER:

T. Nguyen

GROUP ART UNIT:

2877

ATTY. DKT. NO.:

20830-08288

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner For Patents, P.O. Box 1450, Alexandria VA 22313-1450, on the date shown below:

Dated:

11 Aug 2004

By:

John McNelis, Reg. No. 38,186

COMMISSIONER FOR PATENTS

P.O. BOX 1450

ALEXANDRIA, VA 22313-1450

TRANSMITTAL LETTER IN SUPPORT OF INFORMATION DISCLOSURE STATEMENT Under 37 CFR §§ 1.56 and 1.97-98

SIR:

In response to the Office Action dated April 7, 2004, Applicant resubmits the Transmittal Form, Information Disclosure Statement, PTO/SB/08A and postcard filed by Applicants on October 23, 2003, together with the non-patent references previously omitted.

Applicants request that the Examiner consider the references cited in this Information Disclosure Statement.

Should there be a fee required for consideration of the listed references, please charge deposit account 19-2555.

Respectfully submitted,

STEVEN W. MEEKS & RUSMIN KUDINAR

Dated:

11 day 2004

John McNalis Pag No : 27

John McNelis, Reg. No.: 37,186

Fenwick & West LLP Silicon Valley Center 801 California Street

Mountain View, CA 94041

Tel.: (650) 335-7133 Fax.: (650) 938-5200



Date Mailed:	Atty/Se	c: NSH/klm	1
Application No.: 10/660/984			Docket No.: 20830-08288
Applicant(s): Steven W. Meeks & R			
Title: System and Method for Simu	Itaneously	Measuring '	Thin Film Layer Thickness
Please imprint Patent Office "date	stamp" he	reon to indic	ate receipt and return card to addressee. inpublication Request under 35 U.S.C. 22(b)(2)(B)(i).
Provisional Application Cover St		Re	sponse to Notice Of Missing Parts
☐ New Utility Application Transmitt	tal	□Rē	quest for Corrected Filing Receipt
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☐ Declaration	,	⊠ ID:	S, PTO/SB/08A
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Rev. 10/95 U.S. Department of Patent and Trade	Commerce mark Office	Application Number	10/660,984		
		Filing Date	Septemb	er 12, 2003	
TRANSMITTAL FOR		First Named Inventor	Steven W	. Meeks	
(to be used for all correspondence during po- filed application)	∍ndency of	Group Art Unit Number	2877		
		Examiner Name .	T. Nguye	n	
Total Number of Pages in This Submission	8	Attomey Docket Number	20830-082	288	
ENCL	OSURES	(check all that apply	()		
Fee Transmittal Form (in duplicate) Check Enclosed Return Receipt Postcard Response to Notice to File Missing Parl Assignment & Recordation Cover Shee Declaration Power of Attorney Application Data Sheet Information Disclosure Statement & PT Copies of IDS Cited Reference Request for Corrected Filing Receipt Request for Correction of Recorded Assignment/Response: [] Page(s) After Final Status Request Revocation and Substitute Power of Att	ts t O/SB/08A ces signment	Issue Fee Transi Letter to Chief Di Formal Drawing(: [] Sheet(s	mittal raftsperson s): c) of Figure(s) dication to Boar dication to Grou Brief, Reply Br Priority Docur	rd of Appeals and up nef) ment(s)	
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Attorney/Reg. No.: Nathan Huynh/Reg. N	o. 53,052		Dated:	October 23, 2003	
	EDTIFICA	75.05.11.11.11.11			
I hereby certify that this correspondence, including the first class mail in an envelope addressed to: Commist the Express Mail Mailing Number is filled in below, "Express Mail Post Office to Addressee" service pure	ne enclosures id ssioner for Pate then this corres	ents, P.O. Box 1450, Alexandria,			
Signature:	S. 1L	70		•	
Typed or Printed Name: Nathan Huynh	<i>→ 1 ▼</i>	Y	Dated:	October 23, 2003	
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PPLICANT:

Steven W. Meeks and Rusmin Kudinar

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T. Nguyen

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Dated: October 23, 2003

Nathan Huynh, Reg. No.: 53,052

COMMISSIONER FOR PATENTS

P.O. BOX 1450

ALEXANDRIA, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT Under 37 CFR §§ 1.56 and 1.97-98

SIR:

Pursuant to the provisions of 37 CFR §§ 1.56 and 1.97-98, enclosed herewith is modified form PTO/SB/08A listing references for consideration by the Examiner. Enclosed is a copy of each listed reference that may be material to the examination of this application, and for which there may be a duty to disclose.

The filing of this Information Disclosure Statement shall not be construed as a representation regarding the completeness of the list of references, or that inclusion of a reference in this list is an admission that it is prior art or is pertinent to this application, or that a search has been made, or as an admission that the information listed is, or may be considered to be, material to patentability, or that no other material information exists, and shall not be construed as an admission against interest in any manner.

This Information Disclosure Statement is being filed:

within three months of the filing date of the application, or date of entry into the national stage of an international application, or before the mailing date of a first office action on the merits, whichever event last occurred;

_	oololo tiio iiit	and of a first official action after the fifting of a request for
	continued exa	amination (RCE) under 37 CFR § 1.114;
	after three mo	onths of the filing date of this national application or the date
		e national stage in an international application, or after the
		of the first official action on the merits, whichever event last
		before the mailing date of the first to occur of either: (1) a
		nder 37 CFR §1.113; or (2) an action that otherwise closes
		n the application, and:
	attacl	hed hereto is the fee set forth under 37 CFR §1.17(p) for
		hission of this Information Disclosure Statement under 37
		§ 1.97(c); OR
	☐ Appl	icant certifies pursuant to 37 CFR § 1.97(e) that:
	Ö	each item of information contained in this Information
		Disclosure Statement was first cited in a communication
	•	from a foreign patent office in a counterpart foreign
		application not more than three months prior to the filing of
•		this Statement; OR
		no item of information contained in this Information
		Disclosure Statement was cited in a communication from a
		foreign patent office in a counterpart foreign application
		and, to the knowledge of the person signing this
		certification after making reasonable inquiry, no item of
		information contained in this Statement was known to any
		individual designated under 37 CFR § 1.56(c) more than
_		three months prior to the filing of this Statement;
Ц		the payment of the issue fee but after the mailing date of the
		of either: (1) a final action under 37 CFR § 1.113; (2) a
		wance under 37 CFR § 1.311; or (3) an action that otherwise
		ution in the application, and:
	∐ Appli	cant certifies pursuant to 37 CFR. § 1.97(e) that:
		each item of information contained in this Information
		Disclosure Statement was cited in a communication from a
		foreign patent office in a counterpart foreign application not
		more than three months prior to the filing of this Statement;
		or
	Ц	no item of information contained in this Information
		Disclosure Statement was cited in a communication from a

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	applica	ition u	nder 37 C	FR §	1.98(d)	•								
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	and the	comn	nunicatio	n was	not rece	eived b	y any	indiv	/idua	l des	igna	ted in	37 CF	R
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Substitute for form 1449A/PTO

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ORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

	Complete if Known
Application No.	10/660,984
Filing Date	September 12, 2003
First Named Inventor	Steven W. Meeks
Art Unit	2877
Examiner Name	T. Nguyen
Attorney Docket Number	20830-08288

			U.S. PATE	NT DOCUMENTS
		Document No.		
Examiner Initials*	Cite No.1	Number – Kind Code² (if known)	Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
	A1	3,885,875	05/27/1975	Rosenfeld et al.
	A2	4,332,477	06/01/1982	Sato
	A3	4,585,348	04/29/1986	Chastang et al.
	A4	4,668,860	05/26/1987	Anthon
	A5	4,870,631	09/26/1989	Stoddard
	A6 .	4,873,430	10/10/1989	Juliana et al.
	A7	5,017,012	05/21/1991	Merritt, Jr. et al.
	A8	5,129,724	07/14/1992	Brophy et al.
	A9	5,189,481	02/23/1993	Jann et al.
	A10 -	5,196,906	03/23/1993	Stover et al.
	A11	5,270,794	12/14/1993	Tsuji et al.
	A12	5,293,216	03/08/1994	Moslehi
	A13	5,313,542	05/17/1994	Castonguay
	A14	5,406,082	04/11/1995	Pearson et al.
	A15	5,416,594	05/16/1995	Gross et al.
	A16	5,446,549	08/29/1995	Mazumder et al.
	A17	5,463,897	11/07/1995	Prater et al.
	A18	5,608,527	03/04/1997	Valliant et al.
	A19	5,610,897	03/11/1997	Yamamoto et al.
	A20	5,633,747	05/27/1997	Nikoonahad
	A21	5,644,562	07/01/1997	de Groot
	A22	5,694,214	12/02/1997	Watanabe et al.
	A23	5,726,455	03/10/1998	Vurens
	A24	5,748,305	05/05/1998	Shimono et al.
	A25	5,777,740	07/07/1998	Lacey et al.
	A26	5,798,829	08/25/1998	Vaez-Iravani
	A27	5,864,394	01/26/1999	Jordan, III et al.
	A28	5,875,029	02/23/1999	Jann et al.
	A29	5,880,838	03/09/1999	Marx et al.
	A30	5,903,342	05/11/1999	Yatsugake et al.

Examiner	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609.

Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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	Substitute for	form 1449A/I	РТО		Complete if Known		
INFO	RMATIO	N DISC	LOSURE	Application No.	10/660,984		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date	September 12, 2003		
				First Named Inventor	Steven W. Meeks		
				Art Unit	2877		
				Examiner Name	T. Nguyen		
Sheet	2	of	4	Attorney Docket Number	20830-08288		

<u> </u>			U.S. PATE	NT DOCUMENTS
		Document No.	·	
Examiner Initials*	Cite No.1	Number – Kind Code ² (if known)	Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
	A31	5,951,891	09/14/1999	Barenboim et al.
	A32	5,978,091	11/02/1999	Jann et al.
	A33	5,985,680	11/16/1999	Singhal et al.
	A34	5,986,761	11/16/1999	Crawforth et al.
<u> </u>	A35	5,986,763	11/16/1999	Inoue
	A36	5,995,226	11/30/1999	Abe et al.
	A37	6,081,325	06/27/2000	Leslie et al.
	A38	6,088,092	07/11/2000	Chen et al.
·	A39	6,091,493	07/18/2000	Stover et al.
	A40	6,107,637	08/22/2000	Watanabe et al.
	A41	6,118,525	09/12/2000	Fossey et al.
	A42	6,134,011	10/17/2000	Klein et al.
	A43	6,157,444	12/05/2000	Tomita et al.
	A44	6,169,601	01/2001	Eremin et al.
	A45	6,172,752	01/09/2001	Haruna et al.
	A46	6,201,601B1	03/13/2001	Vaez-Iravani et al.
. <u> </u>	A47	6,248,988	06/19/2001	Krantz
	A48	6,271,916B1	08/07/2001	Marxer et al.
	A49	6,307,627	10/23/2001	Vurens
	A50	6,353,222B1	03/05/2002	Dotan
	A51	.6,384,910B2	05/07/2002	Vaez-Iravani et al.
	A52	6,509,966B2	01/21/2003	Ishiguro et al.
	A53	6,542,248B1	04/01/2003	Schwarz
	A54	6,603,542	08/2003	Chase et al.

Examiner Signature	Date Considered	,

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609.

Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁸Applicant is to place a check mark here if English language Translation is attached.

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	Substitute for form 1449A/PTO				Complete if Known
INFO	RMATION	ופוח ו	CLOSURE	Application No.	10/660,984
			PLICANT	Filing Date	September 12, 2003
JIA)	PLICANI	First Named Inventor	Steven W. Meeks
				Art Unit .	2877
			·	Examiner Name	T. Nguyen
Sheet	3	of	4	Attorney Docket Number	20830-08288

			U.S. PATE	ENT DOCUMENTS			
		Document No.					
Examiner Initials*	Cite No. ¹	Number – Kind Code ² (if known)	Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document			
		:	FOREIGN PA	TENT DOCUMENTS			
		Foreign Patent Document	•				
Examiner Initials*	Cite No.1	Country Code ³ – Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD- YYYY	Name of Patentee or Applicant of Cited Document	T ⁶		
	B1	WO 98/52019	11/19/1998	Technische Universiteit Delft			
	B2	JP 3-221804	09/30/1991	NEC Corp			

		•
Examiner Signature	Date Considered	

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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT			то	Complete if Known		
			LOSUDE	Application No.	10/660,984	
				Filing Date	September 12, 2003	
			PLICANT	First Named Inventor	Steven W. Meeks	
				Art Unit	2877	
				Examiner Name	T. Nguyen	
Sheet	4	of	4 .	Attorney Docket Number	20830-08288	

		OTHER REFERENCES - NON-PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Τ ⁶
	C1	W.C. Leung, W. Crooks, H. Rosen and T. Strand, An Optical Method Using a Laser and an Integrating Sphere Combination for Characterizing the Thickness Profile of Magnetic Media, Sept. 1989, IEEE Transaction on Magnetics, Vol. 25, No. 5. Pages 3659-3661.	
·	C2	Steven W. Meeks, Walter E. Weresin, and Hal J. Rosen, <i>Optical Surface Analysis of the Head-Disk-Interface of Thin Film Disks</i> , January 1995, Transactions of the ASME, Journal of Tribology, Vol. 117, pages 112-118.	
	C3	Steven Meeks, Maxtor and Rusmin Kudinar, <i>The Next Battleground: Head-Disk Interface,</i> March 1998, Data Storage, Test & Measurement, pages 29-30, 34 and 38.	
-	C4	Laser Scanning Surface Profilometer, [online], August 1970, [retrieved January 29, 2001], Pages 789-790, Retrieved from the Internet: <url: http:="" tdb?&order="7OC101758.</td" tdbs="" www.delphion.com=""><td>4</td></url:>	4
	C5	Meeks, Steven W.: "A Combined Ellipsometer, Reflectometer, Scatterometer and Kerr Effect Microscope for Thin Film Disk Characterization," Machine Vision Applications in Industrial Inspection VIII, Proceedings of SPIE, vol. 3966, 2000, pages 385-391, XP001085220.	

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Examiner Signature		Date Considered		
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^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609.

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Date Mailed:	Atty/Sec: NSH/klm Filing Date: September 12, 2003			
Application No.: 10/660/984	Docket No.: 20830-08288			
Applicant(s): Steven W. Meeks & Rusmin Kudinar				
Title: System and Method for Simultaneously Measuring Thin Film Layer Thickness				
☐ pages of Specification, Claims Abstract ☐ sheets of formal drawings ☐ Provisional Application Cover She ☐ New Utility Application Transmittal ☐ Fee Transmittal (in duplicate) ☐ Declaration ☐ Assignment & Recordation Cover: ☐ Power of Attorney ☐ RCE Transmittal ☐ Application Data Sheet ☐ Check in the amount of \$	tamp" hereon to indicate receipt and return card to addressee. Nonpublication Request under 35 U.S.C. 122(b)(2)(B)(i). et Response to Notice Of Missing Parts Request for Corrected Filing Receipt Request for Correction of Recorded Assignment IDS, PTO/SB/08A			
☐ Amendment/Response	Express Mail No.			
Other				